Healthy People 2000 Leading Health Indicators
Trends for the 1990s in Alaska

Introduction

In July 1991, the U.S. Centers for Disease Control and Prevention (CDC) released a set of health status indicators, in response to Objective 22.1 of Healthy People 2000. CDC's goal was to develop a set of health status indicators that would be small in number, allow a comprehensive measure of community health, include general and specific measures of community health, be measurable at federal, state and local levels, be readily and uniformly understandable, be measurable using available data, imply specific interventions compelling action, and be outcome oriented.

This special section presents the Healthy People 2000 Health Status Indicators for Alaska during the 1990s. The indicators developed by CDC are used, with two exceptions: first, we added "mortality from other unintentional injuries" because of the magnitude of that problem in Alaska, and second, we did not include "incidence of primary and secondary syphilis" because there are too few cases in Alaska to have a meaningful measurement.

Data are presented for a total of 19 indicators. Healthy Alaskans 2000 set goals or targets for 16 of the indicators. Overall, Alaska met the targets for 10 of the 16 indicators with targets (infant deaths; deaths from work-related injuries, unintentional injuries, motor vehicle crashes, lung cancer, breast cancer, coronary heart disease; incidence of AIDS and measles, and teen birth rate). Targets were not met for: deaths from suicide, homicide, and stroke; incidence of tuberculosis; adequate prenatal care, and air quality. Targets had not been set for overall mortality, low birth weight, and childhood poverty.

Improvement was seen for 12 of the 19 indicators; no change for 4, and the trend appeared to be going in the wrong direction for 3. Compared to the national rate, Alaska is better for 6 of the 19 indicators, about the same for 6, and worse for 7.

The second major goal of Healthy People 2010 is to eliminate health disparities among different segments of the populations. One of the most glaring disparities in Alaska is the difference in health status between Alaska Natives and the non-Native population. In order to show the progress that has been made during the 1990s and the disparities that remain, the data are presented for all Alaskans and for Alaska Natives.

Data were available for Alaska Natives for 15 indicators. Of these, the health status of Alaska Natives remained worse for 12 indicators, compared to the state. However, a trend towards improvement was seen for 8 indicators. For 4 of the indicators, a separate target was set for Alaska Natives (infant mortality, unintentional injuries, suicide, and tuberculosis); the target was met for 2 (infant mortality and unintentional injuries). The Alaska Native indicators also met the overall state target for motor vehicle crash deaths, breast cancer deaths and coronary heart disease deaths.

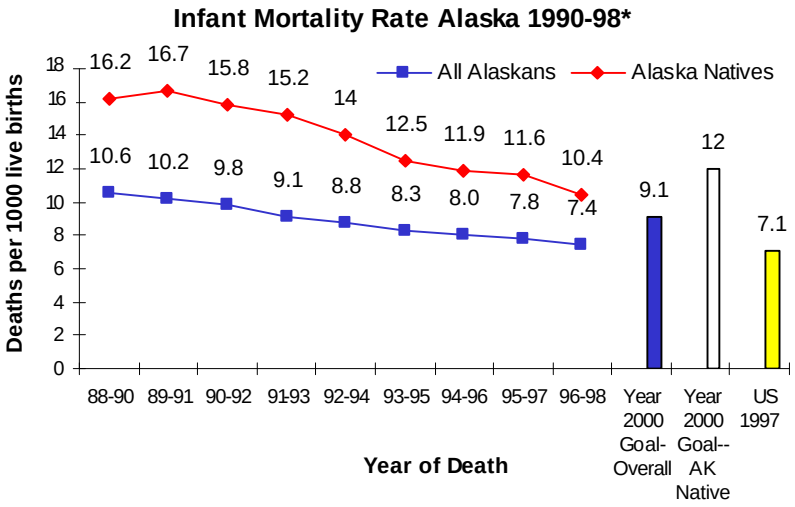
More information on many of the indicators can be found in the subsequent chapters in this report.

Trends in 19 Alaska Health Status Indicators

Infant Mortality ⇑ ♥	Children in Poverty ⇑
Overall Mortality ⇑	Lung Cancer ⇔ ♥
Work-related Mortality ⇑ ♥	
Unintentional Injury ⇑ ♥	Stroke ⇔ ☹
Motor Vehicle Crash Deaths ⇑ ♥	Air Quality ⇔ ☹
Breast Cancer ⇑ ♥	Suicide Mortality ⇔ ☹
Coronary Heart Disease ⇑ ♥	Homicide ⇔ ☹
AIDS ⇑ ♥	Tuberculosis ⇓ ☹
Measles ⇑ ♥	Prenatal Care ⇓ ☹
Teen Birth Rate ⇑ ♥	Low birth weight ⇓
♥ Healthy Alaskans 2000 target met	☹ Healthy Alaskans 2000 target not met
AK Trend: ⇑ Better ⇔ Same ⇓ Worse	

Infant Mortality

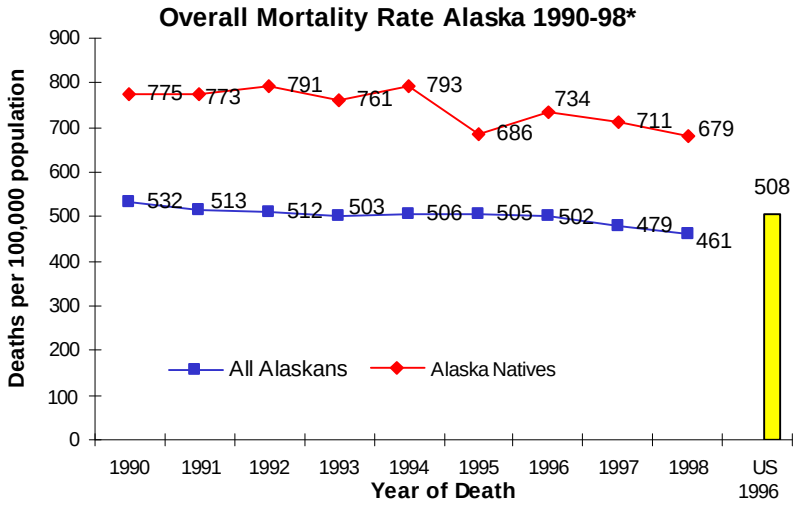
The Alaska infant mortality rate fell during the 1990s by 30%. A similar decline occurred nationally. Declines occurred both in the neonatal mortality rate (deaths prior to the 28th day of life) and in the post-neonatal mortality rate (deaths from the 28th day up to one year of age). The infant mortality rate among Alaska Natives declined by 36%, but remains higher than the overall Alaska rate.



*Data source: Alaska Bureau of Vital Statistics; deaths among infants under one year of age per 1000 live births; 3 year running averages

Overall Mortality Rate

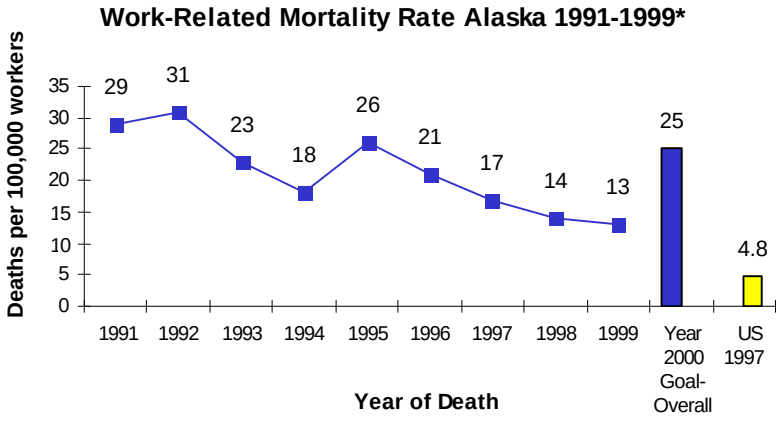
The overall mortality rate fell in Alaska during the 1990s by 13%; among Alaska Natives the rate fell by a similar proportion, but remains substantially higher than the rates for all Alaskans and for the U.S. A similar decline occurred nationally.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1940 population; ICD-9 codes 000-999

Work-Related Mortality

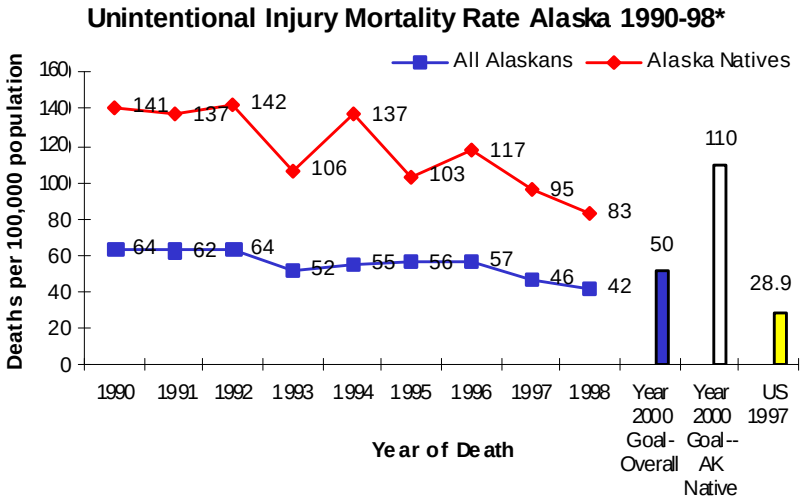
The rate of death per 100,000 workers declined by 55% between 1990 and 1999. Alaska rates remain much higher than comparable the comparable US rate. Among commercial fishers and loggers, two of the high-risk occupations in Alaska, there were substantial declines in occupational injury deaths and in hospitalization from work-related injuries.



*Data source: Section of Epidemiology; rate per 100,000 workers

Unintentional Injuries

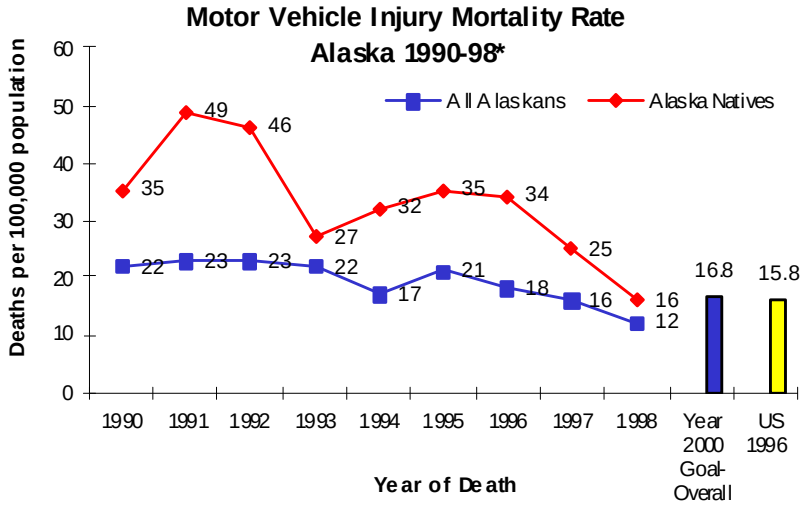
Overall, the death rate from unintentional injuries declined by 34% during the 1990s. A similar decline occurred among Alaska Natives. Among both groups, the selected targets were met. Nonetheless, the rate of unintentional injury death in Alaska remains higher than the comparable US rate, and the rate among Alaska Natives is even higher. The most common causes of injury death in Alaska (includes both intentional and unintentional) are firearms (26.2%), motor vehicles (16.9%), drowning (11.7%), poisoning (5.2%), strangulation (5.0%) and fire/burns (4.1%).



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1940 population; ICD-9 codes 800-949

Motor Vehicle Injury Mortality Rate

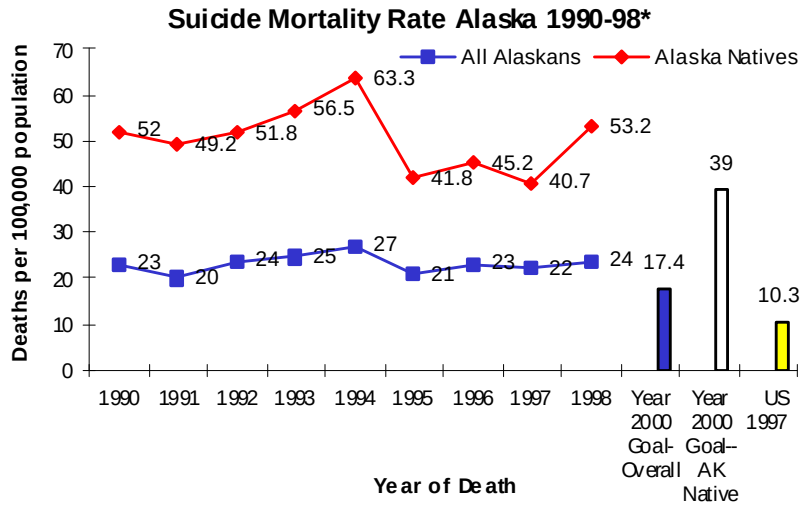
The death rate from motor vehicle crashes declined during the 1990s among all Alaskans by 45%, and among Alaska Natives by 55%. The target was met by the overall state rate and also by the Alaska Native rate. The rate of alcohol related motor vehicle crash deaths also declined during the 1990s.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1940 population; ICD-9 codes 810-825

Suicide Death Rate

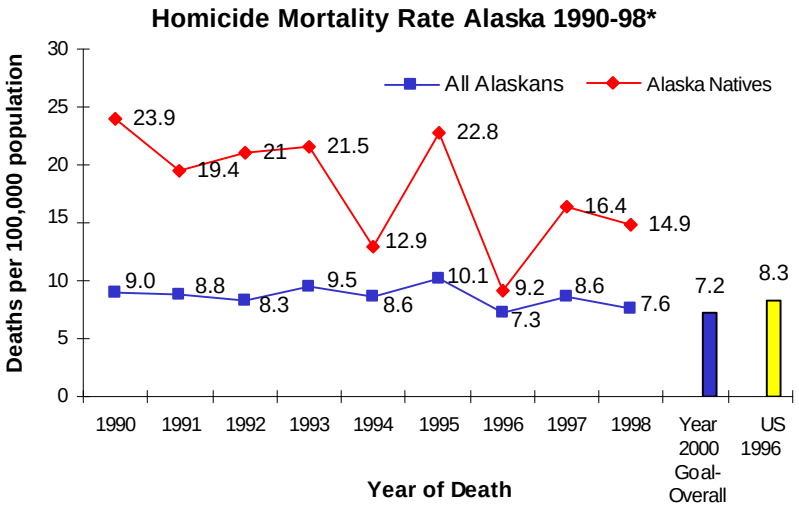
Suicide is the cause of death for over 100 Alaskans each year. Suicide rates are highest among Alaska Natives and young men. Rates did not decline during the 1990s, and neither the overall target nor the Alaska Native target was met.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1940 population; ICD-9 codes 950-959

Homicide Mortality Rate

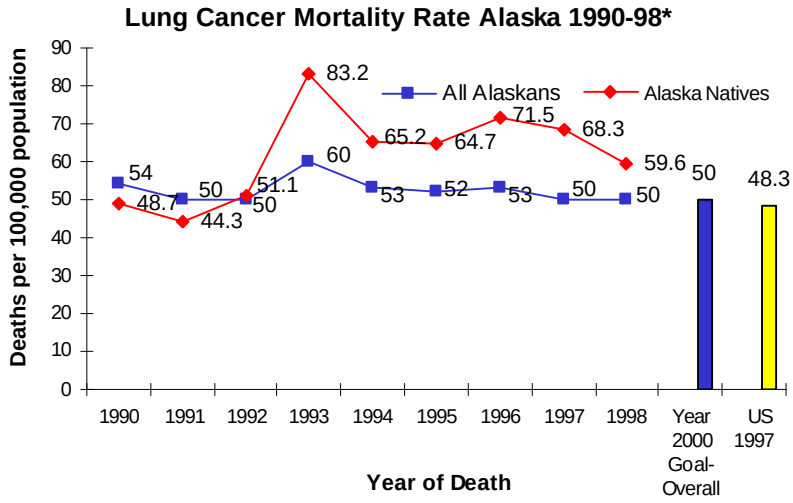
The homicide mortality rate declined by 38% among Alaska Natives during the 1990s. Little change occurred in the overall rate. The target was not reached. For over 65% of homicides, firearms were the method used in 1998. Firearms, through homicide, suicide, or unintentional injury, result in the death of over 100 Alaskans each year.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1940 population; ICD-9 codes 960-978

Lung Cancer Mortality

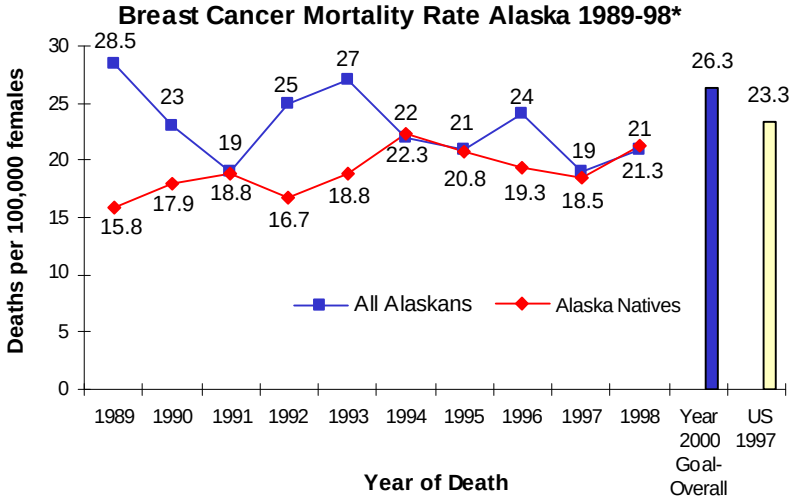
The death rate from lung cancer showed little change during the 1990s. In the decades prior to 1990, lung cancer mortality had been increasing. Because of that trend, the goal for Healthy Alaskans 2000 was that the rate not increase; that goal was met for the overall population. The rate for Alaska Natives remains slightly higher than the comparable rate for all Alaskans.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1970 population; ICD-9 code 162

Breast Cancer Mortality Rate

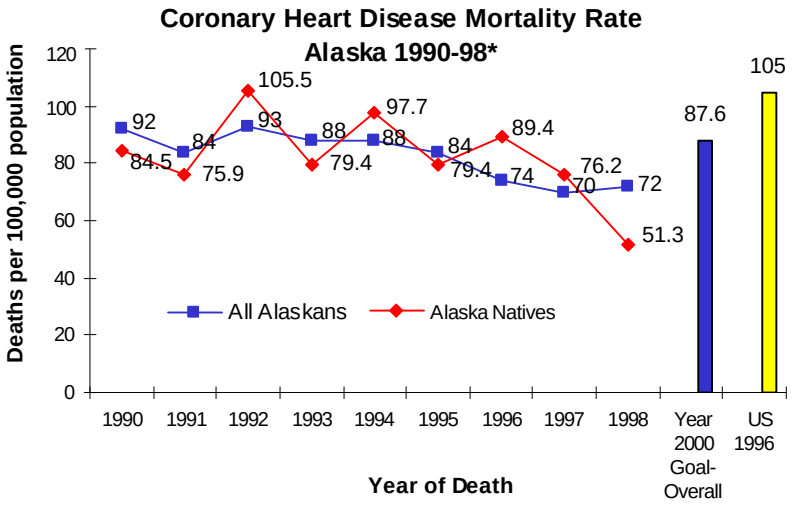
The overall mortality from breast cancer decreased by about 25% during the 1990s. However, the rate increased slightly among Alaska Native women. Alaska rates met the target, and are lower than the comparable US rate. During the 1990s, the utilization of mammography and breast exam increased, among Alaska Natives by 68%, among low-income women by 76%, and among women with little education by 73%.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 females; age-adjusted to US 1970 population; ICD-9 code 174

Coronary Heart Disease

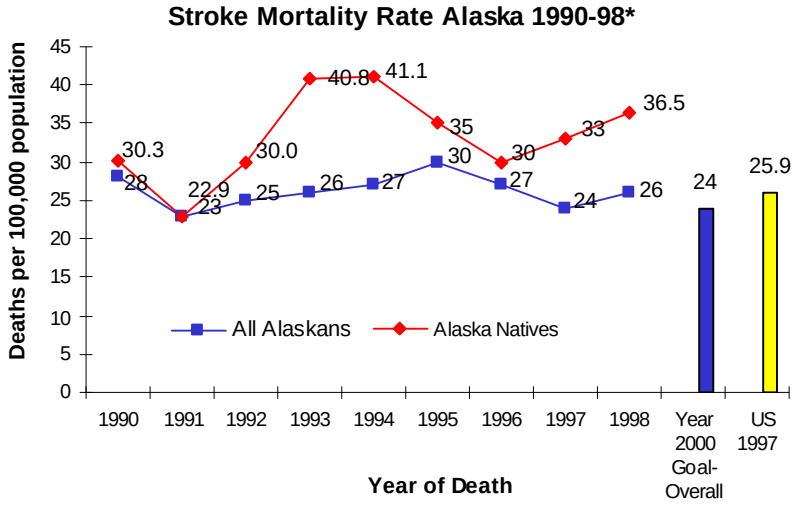
The rate of coronary heart disease death declined during the 1990s, and reached the Healthy Alaskans goal. The rates among Alaska Natives are similar to the rates for the overall population. However, this favorable trend may not continue, as the trends in heart disease risk factors are either going in the wrong direction or not changing. Smoking and sedentary lifestyle remain unchanged, and obesity rates have increased dramatically.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1940 population; ICD-9 codes 402, 410-414, 429.2

Stroke Mortality Rate

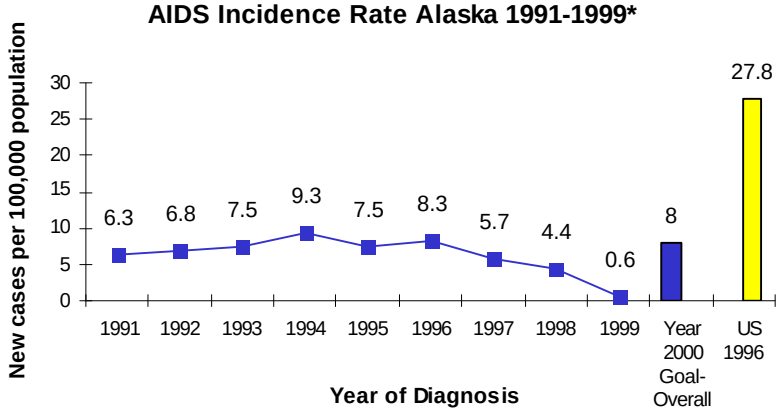
The death rate from stroke has not declined, and has not reached the Healthy Alaskans goal. The rate among Alaska Natives is higher than the rate among the overall population.



*Data source: Alaska Bureau of Vital Statistics; rate per 100,000 population; age-adjusted to US 1940 population; ICD-9 codes 430-438

AIDS Incidence Rate

The incidence of new cases of AIDS declined dramatically during the 1990s. The decline has been attributed to the use of combination antiretroviral therapies, which have delayed the onset of AIDS once HIV infection develops. Nationally, the onset of new HIV infections has not declined. In Alaska, in order to better track the epidemic, HIV reporting was implemented in 1999. AIDS has occurred among all racial and ethnic groups in Alaska.

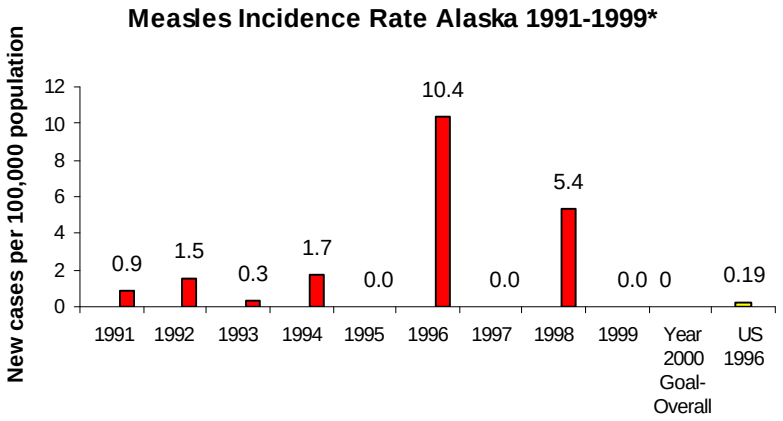


*Data source: Section of Epidemiology

Measles Incidence

Outbreaks of measles occurred in 1996 (63 cases) and in 1998 (33 cases), largely occurring in school-aged children. The 2-dose measles vaccine now required for school entry is expected to prevent further outbreaks.

In 1998 Alaska's rate of immunization of 2-year-olds was 81%, increased from 69% in 1996. The rate remains below the Healthy Alaskans 2000 goal of 90% or higher.

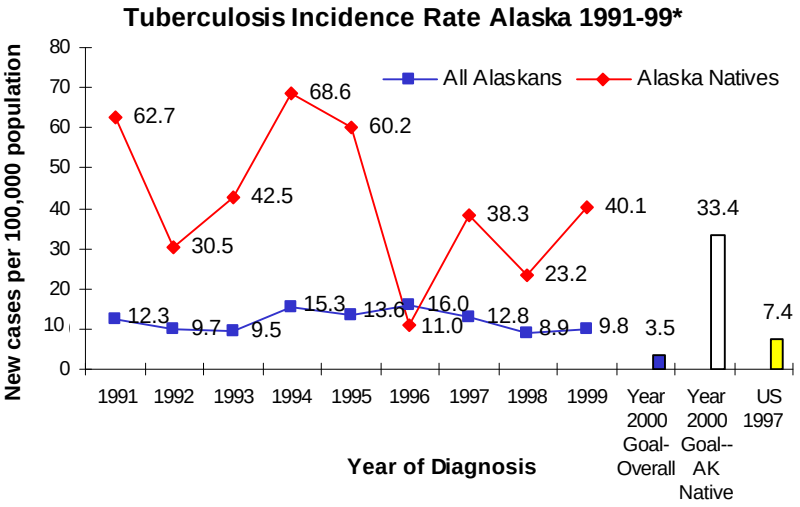


*Data source: Section of Epidemiology

Tuberculosis

During the 1990s, the overall incidence rate of tuberculosis remained fairly constant. The number of cases ranged from a low of 55 to a high of 97. The Alaska rate was higher than the Healthy Alaskans goal, and higher than the US rate.

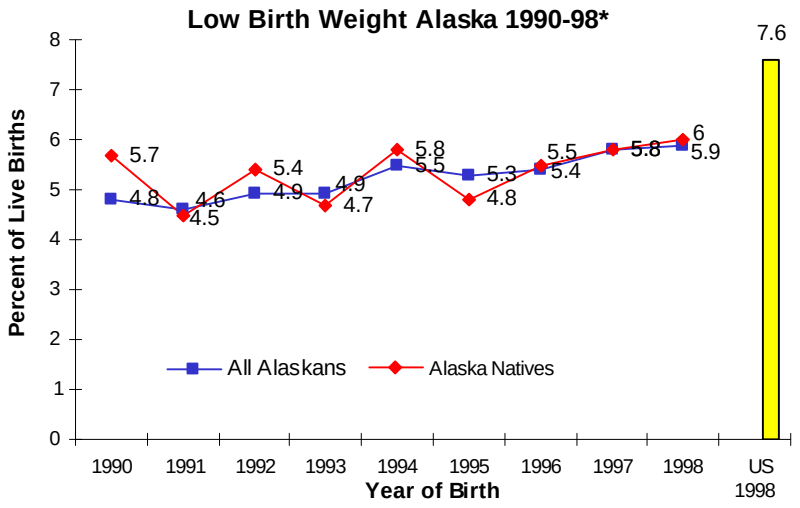
As shown in the graph, Alaska Natives have a much higher rate of tuberculosis. Rates are also high among Asian/Pacific Islanders; the 1998 rate was 38/100,000.



*Data source: Section of Epidemiology

Low Birth Weight

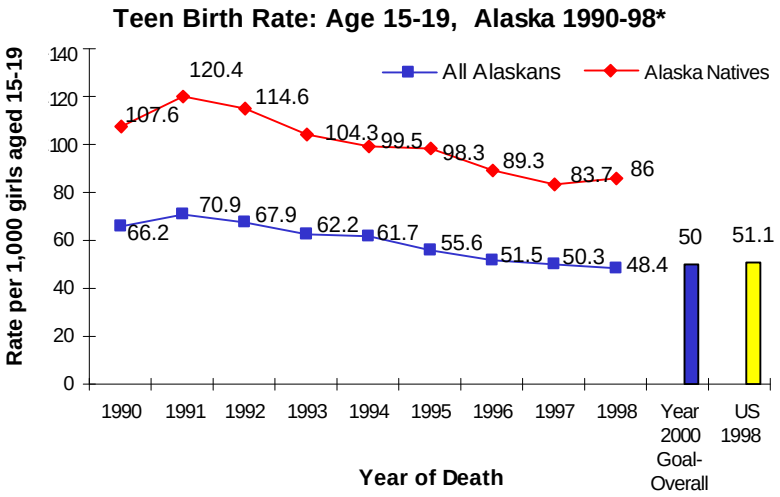
The rate of low birth weight increased in Alaska during the 1990s; a similar trend occurred nationally. Rates for Alaska Natives were virtually identical to the overall state rates. Alaska's rate of low birth weight has been consistently lower than the US rate.



*Data source: Alaska Bureau of Vital Statistics; percent of live births with weight < 2500 grams

Teen Birth Rate

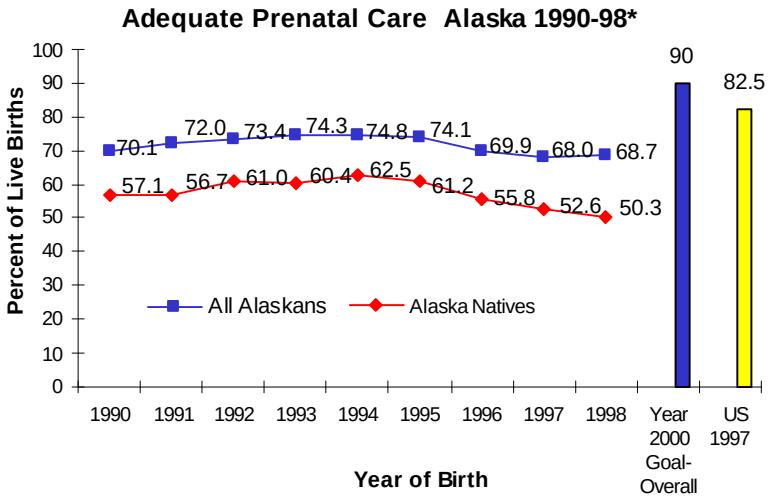
Nationally, and in Alaska, the birthrate among teens declined in the 1990s. From 1991-1998 Alaska had the second largest percent decline in teen births of any state in the United States. National data indicate that the decline in teen births is not due to an increase in abortion, as abortion rates have also declined. Teen birth rates also declined among Alaska Natives, but the Alaska Native rate remains almost twice as high as the comparable state rate.



*Data source: Alaska Bureau of Vital Statistics

Adequate Prenatal Care

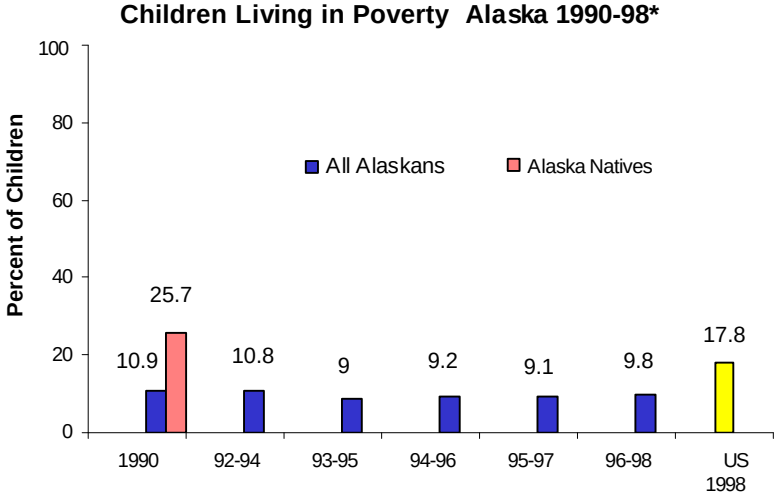
The percent of mothers who received adequate prenatal care remains lower than the Healthy Alaskans goal of 90% or higher. Rates of adequate prenatal care appear to have declined since 1994. The rate among Alaska Natives has also declined and is lower than the comparable state rate.



*Data source: Alaska Bureau of Vital Statistics; percent of live births; adequate prenatal care (Alaska) defined using modified Kessner index; US data is for prenatal care in first trimester

Childhood Poverty

Overall, Alaska's childhood poverty rate is lower than the US rate. The 1990 census showed that Alaska Native children are over twice as likely to be living in poverty. In addition, the Bush, or roadless areas, have much higher rates of childhood poverty. The Current Population Survey conducted by the US Census Bureau has shown a slight decline in the overall state rate of childhood poverty, but the sample size is not sufficient to analyze the data by race. An update will be obtained from the 2000 Census.

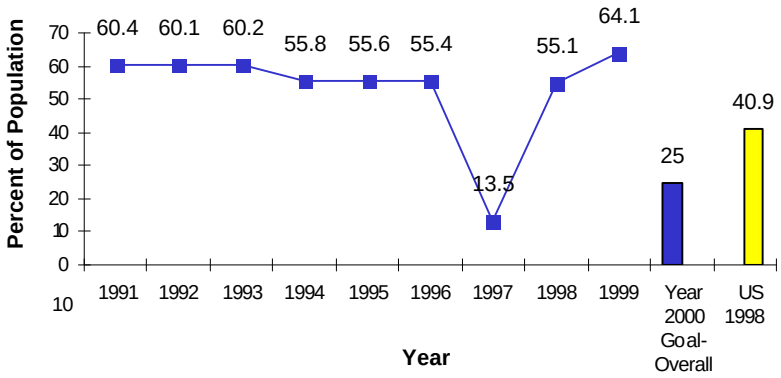


*Data source: US Bureau of Census 1990 Census, Current Population Surveys and NCHS

Air Quality

Of the 6 major air pollutants monitored by the U.S. Environmental Protection Agency, particulates and carbon monoxide are the pollutants of greatest concern in Alaska. Areas of the state that have not meet EPA's standards are the Anchorage Bowl (carbon monoxide and particulates); Eagle River (particulates); Fairbanks metropolitan area (carbon monoxide) and Mendenhall Valley in Juneau (particulates). During the 1990s the state made progress in decreasing the number of days out of compliance with EPA standards. No areas of the state have been out of compliance with particulates since 1996. Carbon monoxide remains a problem in certain areas of Anchorage and Fairbanks.

Residents Living in Areas Exceeding at Least One EPA Air Quality Standard: Alaska, 1991-1999*



*Data source: Alaska Department of Environmental Conservation; Environmental Protection Agency; Alaska Population Overview: 1999 Estimates